

WHAT IS CLAIMED IS:

1. An excitation coil unit for use in an image heating apparatus, comprising:

a coil including a conductor without an  
5 insulation covering; and  
a heat-resistant insulating material covering  
said coil.

2. An excitation coil unit according to claim 1,  
10 further comprising an insulating spacer mounted on  
said coil, wherein the insulating spacer prevents  
contacting parts of the conductors in said coil  
mutually.

15 3. An excitation coil unit according to claim 1,  
wherein said heat-resistant insulating material  
is made by being poured around said coil and then  
hardened.

20 4. An excitation coil unit according to claim 3,  
wherein said heat-resistant insulating material  
is a resinous material.

25 5. An excitation coil unit according to claim 3,  
wherein said heat-resistant insulating material  
is a glass.

6. An excitation coil unit according to claim 3,  
further comprising a holder which accommodates  
said coil and is integrated by said heat-resistant  
insulating material.

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7. An excitation coil unit according to claim 1,  
wherein said coil is obtained by press working  
a metal plate.

10 8. An excitation coil unit for use in an image  
heating apparatus, comprising:

a coil formed with a conductor without an  
insulation covering; and

an insulating spacer so mounted on said coil,  
15 wherein said insulating spacer prevents contacting  
parts of the conductors in said coil mutually.

9. An excitation coil unit according to claim 8,  
further comprising a holder for accommodating  
20 said coil on which said insulating spacer is mounted.

10. An image heating apparatus comprising:  
a conductive rotatable member; and  
an excitation coil unit for generating a  
25 magnetic field to induce an eddy current in said  
conductive rotatable member,

wherein said excitation coil unit includes a

coil formed with a conductor without an insulation covering and said coil is covered by a heat-resistant insulating material.

5           11. An image heating apparatus according to claim 10,

          wherein said excitation coil unit includes an insulating spacer mounted on said coil, wherein said insulating spacer prevents contacting parts of the  
10 conductors in said coil mutually.

          12. An image heating apparatus according to claim 10,

          wherein said heat-resistant insulating material  
15 is made by being poured around said coil and then hardened.

          13. An image heating apparatus according to claim 12,

20           wherein said heat-resistant insulating material is a resinous material.

          14. An image heating apparatus according to claim 12,

25           wherein said heat-resistant insulating material is a glass.

15. An image heating apparatus according to ,  
claim 12,

wherein said excitation coil unit includes a  
holder which accommodates said coil and is integrated  
5 by said heat-resistant insulating material.

16. An image heating apparatus according to  
claim 10,

wherein said coil is obtained by press working  
10 a metal plate.